UNITED STATES DEPARTMENT OF THE INTERIOR
BLM, BOISE DISTRICT

EA #ID110-2007-EA-349 Title Page

Applicant (if any): **BLM/FS Action**	Proposed Action: Construction of 2.03 Miles of Non-motorized Trail on the Boise Front; Permanent Closure of 0.7 Miles of Trail to Motorized Use.			EA No. **ID-110-2007-349**
State: **Idaho**	County: **Ada**	District: **Boise**	Field Office: **Four Rivers**	Authority: **NEPA, FLPMA**
Prepared By: **FRFO ID Team**	Title: **Five Mile Gulch/Curlew Connector Trail Project**			Report Date: **3/5/2008**

LANDS INVOLVED

Meridian	Township	Range	Sections	Acres
Boise	**4N**	**3E**	**Various, see maps**	

Consideration of Critical Elements	N/A or Not Present	Applicable or Present, No Impact	Discussed in EA
Air Quality		x	
Areas of Critical Environmental Concern			x
Cultural Resources			x
Environmental Justice (E.O. 12898)		x	
Farm Lands (prime or unique)	x		
Floodplains	x		
Migratory Birds			x
Native American Religious Concerns		x	
Invasive, Nonnative Species			x
Wastes, Hazardous or Solid	x		
Threatened or Endangered Species		x	
Social and Economic			x
Water Quality (Drinking/Ground)		x	
Wetlands/Riparian Zones		x	
Wild and Scenic Rivers (Eligible)	x		
Wilderness Study Areas	x		

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1.0 Introduction

1.1 Need for and Purpose of Action

The need for this action is to expand and diversify non-motorized, trail-based recreation opportunities for the public because of rapid regional population growth and rising public demand for recreational trail access on the Boise Front. This public demand was clearly expressed in 2001 by the citizens of Boise when they approved a 10 million dollar levy to acquire key parcels of private land and private land easements in the Front, in the face of impending development.

The purpose of this action is to:

(1) develop a new trail that would link trails on public lands with trails on newly acquired City of Boise lands, providing a new set of recreational opportunities for the public in a relatively less-used area of the Foothills, and

(2) make permanent the emergency closure of 0.7 miles of Trail 7 on BLM lands to motorized vehicles.

An emergency closure of Trail 7 (Orchard Gulch Trail) was imposed by the BLM in July, 2006 to "…limit severe damages to soils and vegetation from motor vehicle use and reduce rising user conflicts in areas already designated as non-motorized by restricting motorized access." Permanent closure of a 0.7 mile segment of Trail 7 (Orchard Gulch Trail) to motorized vehicles would allow managers to more effectively enforce other established closures to motorized use in adjacent areas of the Foothills.

1.2 Summary of Proposed Action

(1) Construct a 10,700 foot (2.03 miles) of single-track, non-motorized trail on BLM, U.S. Forest Service, and City of Boise-managed lands that links the Five Mile Gulch Trail (Trail 2) with the Curlew Gulch/Three Bears Trails (Trail 26).

(2) Permanently designate BLM-managed portions of the Orchard Gulch Trail as open to non-motorized use and closed to motorized use.

1.3 Location and Setting

The project area is located in northern Ada County, Idaho, just outside the City of Boise, in the east-central portion of the Boise Foothills, roughly bounded by the Boise Ridge Road on the north, Rocky Canyon Road on the south, Orchard Gulch Trail on the east, and the Three Bears Trail on the west (See Map 1). Elevations of the project area range from about 3800 to 5700 feet. The topography of the project area is moderately to severely steep (20 to 60 percent grades) on south to southwest-facing slopes, mostly composed of erosion-prone, granite-derived soils that are easily disturbed when dry, or when saturated with water. The steep slopes of this portion of the Boise Front are highly dissected by many small, unnamed

drainages as well as a few well-developed, named drainages, including Five-Mile Gulch, Orchard Gulch, and Curlew Gulch. All of the larger drainages, as well as many of the smaller ones, contain significant riparian vegetative communities and wildlife habitat.

Rising dramatically behind the city of Boise, the foothills of the Boise Front have evolved from a little-visited scenic backdrop into an important regional recreation asset for the rapidly expanding population of southwest Idaho. The extensive 90+ mile trail and road system of the Boise Front that has developed over the years provides the public with opportunities for hiking, nature viewing, horseback riding, mountain biking, driving for pleasure, and OHV activities. The Boise Foothills are an 80,000+ acre area roughly bounded by State Highway 55 on the west, State Highway 21 on the East, the Boise Ridge Road on the north, and by a variable line where the foothills meet the valley floor on the south.

About 12,000 acres of this area are managed by the BLM, 8,500 acres by the Forest Service, 2,138 acres by the City of Boise, 2,300 acres by Ada County, 7,100 acres by the Idaho Department of Lands, and 6,500 acres by the Idaho Department of Fish and Game. The remaining acreage is privately-owned.

Since 1992, a group of seven public agencies, the Ridge-to-Rivers Partnership, has provided coordinated management of recreation, wildlife, watershed, and residential growth in the Boise Front. The involved agencies (including BLM and the Forest Service) signed a Memorandum of Understanding (MOU) in 1999 to, "…preserve, protect, enhance, perpetuate, and manage the resources of the Boise Front, working together with private landowners." This coalition has produced several plans and other documents that propose zoning and management of land for a variety of uses. In 2000, the partners signed the Ridge-to-Rivers MOU, defining the goals and relationships of the involved agencies, and set up the current protocols for unified management of the recreational trails system in the Boise Foothills.

1.4 Conformance with the Land Use Plan

The Five-Mile Gulch Trail Project is in conformance with the BLM's Cascade Resource Management Plan (USDI, 1988). The Plan states:

(1) The Boise District will provide and maintain recreation opportunities and facilities on public lands. Recreation facilities (will be) provided to meet existing or anticipated demand, for public safety, and to protect recreation facilities.

(2) Within the 12,000 acre Boise Front Area of Critical Environmental Concern (ACEC), the following activities will receive management emphasis or resource use limitations to further protect resource values:
   a. Motorized and non-motorized vehicle use will be limited to designated roads and trails;
   b. The area will be managed to conform to Class II Visual Resource guidelines;
   c. Water control structures will be installed to reduce erosion where needed;
   d. Certain existing roads and trails will be closed and rehabilitated.

The project is also in conformance with the Boise National Forest Plan (USDA, 2003):

Recreation Objective 0431: "Coordinate with the City of Boise to integrate the Public Lands Open Space Management Plan for the Boise Foothills into Forest Management activities in the Boise Foothills."
Recreation Objective 0432: "Coordinate with Ridge to Rivers trail organization to implement trail improvements."
Recreation Objective 0435: "Expand dispersed recreation opportunities by developing additional summer and winter trails along the heavily-used Boise Front."

1.5 Relationship to Statutes, Regulations, and Other Requirements

The project would be in conformance with the multi-agency adopted *Public Land Open Space Management Plan for the Boise Foothills* (2000) that lists a principal goal and related objectives for recreation use on the public lands of the Boise Foothills:

"Goal: Provide the public with a wide range of recreational opportunities compatible with other plan goals at appropriate places, while taking care to protect the ecological diversity of the Foothills.

Objective 1: Manage recreation uses to be compatible with the natural resources found in the Foothills;
Objective 2: Manage trails and trailheads to protect Foothills resources, take pressure off the Boise River Wildlife Management Area (WMA), reduce trail conflicts, and offer additional recreation opportunities;
Objective 3: Have recreational activities and improvements avoid or minimize impacts to important resource values;
Objective 4: If negative impacts to critical resources occur due to a recreational facility or use, seek to mitigate, relocate, or impose seasonal closures to address the impacts."

1.6 Scoping and Development of Issues

A map showing the location of the proposed new trail was shown to the public at an Open House/Workshop at the Foothills Learning Center in Boise in November, 2004. The meeting was conducted by Ridge to Rivers/City of Boise personnel, assisted by personnel from BLM, USFS, Ada County, and the Idaho Department of Fish and Game. Workshop organizers solicited written and verbal comments from the public about a variety of foothills-related issues, including the trail project, during and after the meeting. Comments gathered as a result of this effort were strongly supportive of the new trail. Discussion with Fish and Game personnel about potential impacts to wildlife, particularly deer during the winter months, helped guide development and refinement of the project.

BLM's emergency closure of the Orchard Gulch Trail in July, 2006 to motorized use was made in response to a request from Ridge to Rivers personnel who noted that negative social and environmental impacts were occurring on and around the trail as a result of motorized

use. BLM's emergency closure was preceded by discussions about the potential closure with a representative of a local motorized recreation group, Treasure Valley Trail Machine Association. At that time, the representative felt that the loss of 0.7 miles of motorized opportunity as a result of the closure would not be significant because the trail did not provide motorized users with loop connections or other kinds of unique or high quality recreation experiences, and because several other more desirable motorized routes were available for recreation use nearby in the Foothills.

2.0 Description of the Alternatives

2.1 Alternative Development Process

BLM developed the alternatives in this environmental assessment in coordination with internal staff listed on the face sheet of the document; Ridge to Rivers Trail Coordinator, David Gordon; Forest Service Personnel in the Boise Front Office of the USFS's Mountain Home Ranger District, Boise National Forest; and conversations with Boise River Wildlife Management Area Manager, Ed Bottum. The alternatives were also shaped by public comment gathered at the November, 2004

2.2 Alternatives Considered But Not Analyzed in Detail

The addition of another new trail on BLM-managed public lands a few miles west of the project area was considered as a potential project for analysis in this EA, but was rejected because no public scoping of the project had occurred, and required resource inventories of the proposed trail route had not yet been scheduled.

2.3 Description of Proposed Action and Alternatives

2.3.1 Alternative 1 – No Action/Continue Current Management

No new trail linking Five-Mile Gulch Trail with Three Bears/Curlew Connector trails would be constructed. The current emergency closure of Trail 7 (Orchard Gulch Trail) would be lifted, allowing motorized use on the 0.7 mile segment to resume.

2.3.2 Alternative 2 – Proposed Action

The proposed action would be to construct a 10,700 foot (2.03 miles) single track, non-motorized trail on about 1.5 miles of BLM, 0.5 mile of USFS, and 0.03 miles of City of Boise-managed lands (Map 2). The trail would link existing non-motorized Trail 2 (Five-Mile Gulch Trail), in the eastern part of the Boise Front, to Trail 6 (Curlew Connector Trail), further to the west. The Proposed Action would also permanently designate Trail 7 as non-

motorized on BLM lands from its junction with Rocky Canyon Road, north to the BLM/City of Boise property line, a distance of approximately 0.7 miles. All of Trail 7 would remain open to non-motorized trail activity, including foot, mountain bike, and equestrian use.

The new 2.03 mile trail would be constructed using a motorized Kubota backhoe/tractor and hand tools. The trail would contour across a relatively steep area of the foothills, but over its entire length would gain or lose relatively little elevation, beginning at an elevation of about 4720 feet on the east, and terminating at an elevation of about 4620 feet at the western end.

On side slopes greater than 30%, a full bench trail tread would be cut. A full bench trail tread is a trail surface whose full width is cut into the side of a hill. In cross section, the full bench cut looks something like a park bench.

On slopes less than 30%, a ¾ bench trail tread would be cut. The tread surface of a ¾ bench is mostly established by a cut into the hillside, but is also created by using the soil from the cut to provide a portion of the tread surface on the lower (outside) edge of the trail.

Trail grade would not exceed 10% at any point. Where prevailing grade runs would otherwise exceed 100 feet in length, grade reversals (slight ups or downs) would be incorporated into the trail design to reduce the velocity of water runoff. Finished trail tread width would be 30 inches, but the total width of the area affected (disturbed) during construction activities would be about 10 feet. Where possible, trail tread surfaces would be gently out-sloped to avoid the accumulation of standing water on the trail surface.

The trail would be periodically maintained using both mechanized and hand tools to knock down berms to reestablish drainage, repair washouts, and clear rocks or other obstructions from the tread surface.

The trail would have directional and informational signs placed at junctions with other trails, and at occasional intervals along its length.

The trail would be managed in accordance with Idaho Department of Fish and Game's (IDFG) adjacent Boise River Wildlife Management Area protocols during periods of snowy winter weather when deer herds utilize lower elevation areas of the Foothills. Managing agencies would post signs at trail access points requesting that recreational users stay off the trail during these periods, and would remove the signs and reopen access after consultation with IDFG, when snow receded.

2.3.3 Alternative 3

No new trail linking Five Mile Gulch with the Curlew Connector Trail would be constructed, but the current emergency closure of Trail 7 to motorized use would be made permanent. All of Trail 7 would remain open to non-motorized use.

3.0 Affected Environment and Environmental Consequences

3.1 Soils/Watershed

3.1.1 Affected Environment – Soils/Watershed

Soils in the project area formed in residuum and alluvium from igneous rock on side slopes and hill tops. They are generally moderately deep to deep and well-drained. Surface textures are dominantly coarse with subsoils varying from loamy sands to clay loams. The hazard of erosion by water for these soils is high and slope is a critical factor in the soil's susceptibility to these forces. Annual precipitation received averages 15 to 20 inches, with most being infiltrated into the soils. Little water is yielded as overland flow except during high intensity events. Established and user-created trails up steep slopes have caused localized soil erosion.

Streams in the area are largely intermittent, with little or no summer flows in most years. Water sources are mainly derived from surface runoff, with few springs occurring in the area. The main drainage in the area is Fivemile Creek which is a tributary to Cottonwood Creek. Average stream gradients range from 300 to 400 feet per mile (6-8%) and streambeds tend to be relatively small in cross section. Flood plains for the drainages are narrow and restricted by the steep topography in these dissected granitic foothills.

3.1.2 Environmental Consequences – Soils/Watershed

3.1.2.1 Alternative 1

No new trail would be built, so actions associated with trail construction and recreational use that cause vegetation and soil disturbance and result in accelerated erosion would not occur. Lifting the closure of Trail 7 to motorized use would result in elevated levels of soil disturbance and accelerated erosion (especially when soils are wet).

3.1.2.2 Alternative 2

Construction of 2.03 miles of new single track non-motorized trail would result in disturbance of existing vegetation (total removal) and soils in the construction zone. This would result in both on-site and off-site accelerated erosion (dependent on the degree of disturbance and post disturbance climatic events). After the trail has seasoned (been compacted by use) and a regimen of regular trail maintenance has begun, initial erosion rates would be greatly reduced. The route of the 2.03 mile trail would cross two feeder tributaries to Five Mile Gulch and another minor intermittent drainage to the west. Trail construction leading to and crossing these tributaries to Fivemile Creek has the potential to increase sediment into the system. This would be most apparent during and immediately following construction. The incorporation of best management practices during the construction phase would aid in minimizing this problem. Post construction recreational use would involve frequent crossing

of these drainages, and this has the potential to be a minor, but steady source of sediment to these systems.

The permanent closure of Trail 7 to motorized use would be beneficial to the soil resource by eliminating disturbances caused by mechanized travel, especially in the springtime. Some natural rehabilitation as a result of re-vegetation should occur over time, and would aid in stabilizing the disturbed surfaces, reducing sediment delivery into drainages.

Alternative 3

Impacts of no new trail being constructed would be the same as those described in Alternative 1. Impacts of the permanent closure of Trail 7 to motorized use would be the same as described in Alternative 2.

3.2 Vegetation/Special Status Plants/Invasive Species

3.2.1 Affected Environment –Vegetation/Special Status Plants/Invasive Species

Native upland vegetation in the project area consists of an overstory of big sagebrush, antelope bitterbrush, and rabbitbrush with a variable understory composition including bluebunch wheatgrass, Idaho fescue, bottlebrush squirreltail, Sandberg bluegrass, lupine and arrowleaf balsamroot. Much of the project area has burned, sometimes repeatedly, and annual and perennial invasive plants are now common throughout the area, including cheatgrass, medusahead wild rye, tumble mustard, and rush skeletonweed. Small stands of Douglas fir and ponderosa pine occur at the upper reaches of the area.

Riparian vegetation is found in the larger drainages of the project area, and commonly consists of an over story of willows, alder, red-osier dogwood, golden currant, cottonwood, water birch, chokecherry, and ninebark, with a mixture of grasses, sedges, and horsetail in the understory.

There are two special status plant species known to occur in the general vicinity of the project, Aase's onion (*Allium aasae*) and Wilcox' primrose (*Primula wilcoxiana*). A review of existing botanical surveys did not locate these plants along the proposed trail route. A botanical survey of the route of the proposed trail has been conducted. The inventory did not detect the presence of either Aase's onion, or Wilcox'primula.

3.2.2 Environmental Consequences – Vegetation/Special Status Plants/Invasive Species

3.2.2.1 Alternative 1

No new trail would be built, so actions associated with trail construction and recreational use that cause vegetation and soil disturbance and result in accelerated erosion would not occur. Lifting the closure of Trail 7 to motorized use would result in elevated levels of soil

disturbance and accelerated erosion (especially when soils are wet), and this could produce moderately negative effects to the health and vigor of both upland and riparian native vegetation in localized portions of the project area over the long term.

3.2.2.2 Alternative 2

Construction of 2.03 miles of new single track non-motorized trail would result in the loss of existing vegetation (total removal) in the construction zone. This would result in an increased risk of establishing invasive, weedy plants in the disturbed areas, and accelerated erosion, both on-site and off-site, degrading habitat for a variety of native plant species in a localized area in the vicinity of the trail. After the trail has seasoned (been compacted by use) in one to two years and a regimen of regular trail maintenance including weed treatments has begun, erosion rates would be greatly reduced and impacts to vegetation would be low over the long term.

The proposed trail would cross two feeder tributaries to Five Mile Gulch and another unnamed intermittent drainage to the west. Trail construction leading to and crossing these drainages has the potential to increase sediment into the system, negatively affecting riparian vegetative communities. This would be most apparent during and immediately following construction. The incorporation of best management practices such as the use of straw wattles to trap sediment in drainages during the construction phase would aid in minimizing this problem (Levinski 1982). Post construction recreational use would involve frequent crossing of these drainages, and this has the potential to be a minor, but steady source of sediment to these systems and would have a minor, adverse impact to riparian vegetation over the long term.

The permanent closure of Trail 7 to motorized use would be beneficial to the vegetative resource by eliminating disturbances caused by mechanized travel, especially in the springtime. Some natural re-vegetation along the margins of the formerly motorized route should occur over time, and would aid in stabilizing the disturbed surfaces, reducing sediment delivery into drainages, increasing the health and vigor of affected riparian vegetative communities. Closure to motorized vehicles would eliminate one potential source for the introduction of noxious weeds which would benefit upland plant communities adjacent to the closed area over the short and long term.

3.2.2.3 Alternative 3

Impacts from not constructing a new trail would be as described in Alternative 1. Impacts from the permanent closure of Trail 7 to motorized use would be the same as described in Alternative 2.

3.3 Fish and Wildlife/Special Status Animals

3.3.1 Affected Environment – Fish and Wildlife/Special Status Animals

The project area is within a critical mule deer winter range. Numerous other large and small mammals are found within the project area, including black bear, mountain lion, and coyote. The area also contains numerous upland game birds (e.g. California quail, blue grouse, dove, chukar partridge, gray partridge), non-game birds, (e.g. western meadowlark, chipping sparrows, canyon and rock wren, vesper sparrow, sage thrasher, willow flycatcher, song sparrow, yellow breasted chat, yellow warbler, lazuli bunting), and an abundance of raptors (including golden eagle, Cooper's hawk, sharp-shinned hawk, red-tailed hawk, northern harrier, and kestrel) and reptiles such as Gopher Snake, western rattlesnake, rubber boa, and sagebrush lizard. Amphibians including long-toed salamander and western toad are found in riparian areas. No threatened or endangered animals are known to inhabit the area, though there have apparently been several sightings of grey wolves on the Boise Front in recent years.

Historically, mountain quail (*Oreotyx pictus*), occupied the Boise Front, and as recently as 1990 were observed near Fivemile Creek. Planning efforts to reintroduce mountain quail to the Boise Front are underway. Several observations of greater sage-grouse have been reported near the project area within the last few years. Sage-grouse numbers are expected to increase in the area, barring large wildfires or outbreaks of disease. Several sensitive species of bats are known to occur in the vicinity of the project area including fringed myotis, pallid bat, Western small-footed bat, long-legged myotis, and Townsend's big-eared bat.

3.3.2 Environmental Consequences – Fish and Wildlife/Special Status Animals

3.3.2.1 Alternative 1

No new trail would be built, so actions associated with trail construction and recreational use that result in disturbance to wildlife would not occur. Motorized use of 0.7 miles of Trail 7 would resume, and over the long term this would result in moderately elevated levels of disturbance to wildlife along this stretch.

3.3.2.2 Alternative 2

Construction of 2.03 miles of new trail would result in a slight to moderate increase in both direct and indirect negative impacts to several species of terrestrial wildlife, most notably mule deer, and birds, (both upland game species and nesting passerine birds). Direct impacts to these species may include temporary displacement of animals as recreational trail users pass nearby, resulting in disruption of breeding, nesting, and foraging activities, including exposure of eggs and young to predation and weather due to flushing and avoidance or abandonment of areas near heavily-used trails. Seasonal closure of the trail during periods of heavy snow cover would help to minimize disturbance to wintering deer.

The permanent closure of Trail 7 to motorized use would be beneficial to the wildlife resource by eliminating the disturbance caused by motorized travel, especially in the early spring nesting/breeding/rearing period.

Jalkotzy et al. (1997) found that travel corridors (such as roads or trails) had six major effects on wildlife. These included individual disruption, social disruption, habitat avoidance, habitat disruption or enhancement, direct or indirect mortality, and population effects. Deer and many other species are most susceptible to human disturbance during winter and early spring when energy reserves are lowest and the energy and nutritional demands of pregnant females are greatest. The proposed new trail would have little recreational use in the winter, but that use would increase substantially beginning in early spring through late June, declining to a low level through the hottest period of the summer and resuming at a relatively high level again through the fall.

Deer herds would be only slightly affected by construction and subsequent use of the trail because they generally occupy higher elevation areas of the foothills above the proposed trail during the periods of greatest recreational use. Seasonal trail closures during the winter would help minimize impacts to mule deer.

Ridge to Rivers Trail maps and signs at trail kiosks prominently discuss appropriate ethical behaviors for trail users, including the importance of avoiding harassment of wildlife, and keeping dogs on leash or under control on trails. Ridge to Rivers officials have stated that public compliance with rules has been generally good, so impacts to wildlife from trail use are expected to be slight and localized.

Impacts to passerine birds and upland game birds in critical riparian areas during breeding and nesting periods would be expected to be slight as well because the proposed trail would cross each of the affected drainages via a short, direct route, rather than traveling through them for extended distances, exposing birds in the vicinity of each crossing to only brief, localized encounters with recreational users. However, riparian connectivity would be slightly broken which could directly impact mountain quail. Also, increased indirect disturbance to riparian dependent wildlife species including bats and mountain quail is expected because non-motorized traffic along Five Mile Gulch is expected to increase with the completion of the new loop trail. The existing Five Mile Gulch Trail from Rocky Canyon Road to its junction with the proposed new trail parallels Fivemile Creek, but for most of its length is some distance away and above the creek, minimizing disturbance to wildlife within the riparian zone.

3.3.2.3 Alternative 3

No new trail would be built, so actions associated with trail construction and recreational use that result in disturbance to wildlife would not occur. Impacts from the permanent closure of Trail 7 to motorized use would be the same as described in Alternative 2.

3.4 Recreation

3.4.1 Affected Environment - Recreation

As regional population has grown, the project area has become more popular for non-motorized, trail based recreation activities, including hiking, running, mountain biking, horseback riding, and nature viewing. Though Five Mile Gulch Trail (Trail 2) has long been used by the public for recreation, for the first time since the City of Boise acquired the Noble property, the 2006 edition of the Ridge to Rivers Trail map showed the trail as legally open for public use, running from its junction with Rocky Canyon Road on BLM, through the Noble property and ending with its junction with the Boise Ridge Road on U.S. Forest Service-managed lands. Ridge to Rivers personnel report substantial increases in recreation use of this trail and of the connecting Orchard Gulch Trail since the new map was released in 2006 (D. Gordon, Pers. Comm. 2006)

Though direct recreation use observations for the project area are not available, BLM estimates that dispersed recreation use for the 12,000 acres of the Boise Front that it manages was about 121,000 visits in 2006. Recreation in the vicinity of Rocky Canyon Road near the project area was estimated by BLM at around 13,000 visits in 2006 (USDI, BLM, RMIS 2006).

Currently, there are 26 miles of primitive roads, 41 miles of 4-wheel-drive trails, and 28 miles of multiple use trails available for motorized recreation use in the Boise Front, and more than 150 miles of recreation trails specifically managed for motorized use in the nearby Danskin area, dominantly located on U.S. Forest Service-managed lands.

3.4.2 Environmental Consequences – Recreation

3.4.2.1 Alternative 1

No new connecting trail between Five Mile Gulch and the Curlew Connector trails would be constructed. Compared to Alternative 2, this would result in less diversity of recreation experience for non-motorized uses. The lifting of the current emergency closure of Orchard Gulch Trail to motorized use would marginally expand motorized recreation opportunity, restoring motorized access to a short, low quality route that comprises less than 1% of the available motorized routes in the Boise Front. Re-opening this trail segment to motorized use would also result in increased enforcement problems for BLM, U.S. Forest Service, and City of Boise, as some motorized users would likely access connecting non-motorized trails from this trail segment, as they did before the emergency closure of the Orchard Gulch Trail.

3.4.2.2 Alternative 2

Construction of 2.03 miles of new single track trail would enhance recreation experience for non-motorized users by providing a trail access in a less-developed and less-crowded area of the foothills than is currently available in the Hulls Gulch or Military Reserve regions of the foothills. The Proposed Action would also open up new possibilities for longer distance non-motorized trail routes by connecting Trail 2 with Trail 6, connecting trail users in the Five

Mile Gulch/Curlew Gulch region to a variety of trails in both the Hulls Gulch and Military Reserve areas.

A permanent closure of 0.7 miles of Trail 7 (Orchard Gulch Trail) from Rocky Canyon Road to the BLM/City of Boise property line to motorized use would further restrict motorized use of the foothills, reducing recreational opportunity for motorized users to a small degree. However, the permanent closure of this route would help to reduce or eliminate the illegal use of non-motorized Ridge to Rivers routes in this portion of the Foothills by eliminating motorized access to this area from heavily-traveled Rocky Canyon Road. Until the recent emergency closure by BLM, legal use of Trail 7 for motorized users had been limited to a short (0.7 miles), out and back route, since Trail 7 was already legally closed to motorized use as soon as it left BLM. Virtually all other roads and trails open to motorized use in the foothills have connections that allow for loop opportunities and extended rides. Because this trail segment offered such a limited, low quality motorized recreation experience, and its permanent closure would result in loss of considerably less that 1% of the available motorized route mileage in the foothills recreational trail/road system, adoption of the Proposed Action would have little effect on the overall quality of motorized recreation opportunity in the foothills. Restriction of the entire length of Trail 7 to non-motorized use should result in a narrowing of the trail surface over time, providing a more natural and desirable recreation experience for mountain bikers, hikers and equestrians.

3.4.2.3 Alternative 3

Impacts of no new trail being constructed would be the same as those described in Alternative 1. Impacts of the permanent closure of Trail 7 to motorized use would be the same as described in Alternative 2.

3.5 Visual Resources

3.5.1 Affected Environment Visual Resources

The project is managed as Visual Resource Management (VRM) Class II. BLM's management objective for this VRM Class is to retain the existing character of the landscape. The appropriate level of allowable change to a Class II landscape should be moderate, where management activities may draw attention, but should not dominate the view of the casual observer.

3.5.2 Environmental Consequences – Visual Resources

3.5.2.1 Alternative 1

No new trail would be built, so actions associated with trail construction that cause obvious vegetation and soil disturbance and result in a localized, short term degradation of visual

quality would not occur. Lifting the closure of Trail 7 to motorized use would result in slightly elevated levels of soil disturbance and accelerated erosion (especially when soils are wet) which could negatively affect visual quality in a small portion of the project area over the long term.

3.5.2.2 Alternative 2

Construction of 2.03 miles of new single track non-motorized trail would result in disturbance of existing vegetation (total removal) and soils in the construction zone, and would result in noticeable short-term impacts to visual quality in a localized area of the Boise Front, but because the trail follows a sinuous route, appearing and disappearing to the viewer as it contours around hillsides, these impacts would be brief and discontinuous, and would not dominate the view of the casual observer. Over time, as disturbed soils re-vegetated, the obvious scars along the route of the trail would soften and become less visible.

The permanent closure of Trail 7 to motorized use would slightly improve visual quality by eliminating the disturbance caused by motorized travel, especially during muddy periods in the spring. Some natural rehabilitation as a result narrowing of the tread surface of the route and re-vegetation of the edges should occur over time, and would improve visual quality in a small portion of the project area.

3.5.2.3 Alternative 3

Impacts of no new trail being constructed would be the same as those described in Alternative 1. Impacts of the permanent closure of Trail 7 to motorized use would be the same as described in Alternative 2.

3.6 Cultural Resources

3.6.1 Affected Environment – Cultural Resources

A variety of cultural resources are in the general area according to BLM records. Previously recorded sites include: a small prehistoric lithic scatter, some historic debris associated with the Grub Stake Mine, a stone foundation, a hunting blind, a historic scatter, and some mineral prospecting pits. The Rocky Canyon Road was known as the Boise to Idaho City Stage Road. For a time it was operated as a toll road and a site interpreted as the operator's residence has been recorded.

Early maps dated 1892 and 1893 recorded Rocky Canyon Road and roads or trails leaving this road and continuing up both Five Mile Gulch and Orchard Gulch.

Records maintained by the BLM indicate that the lands now managed by Boise City were previously patented to private citizens using the Homestead Entry Act in 1909, 1911, 1912, and 1916.

A preliminary survey was conducted by the Four Rivers Archaeologist along the proposed route through BLM, USFS and City of Boise lands. The inventory noted the existing trail/road in Five Mile Gulch and a root cellar structure made out of concrete located near Fivemile Creek. The inventory also revealed the remnants of a historic pipeline feature dating from the 19th century that was constructed to carry water from higher elevation springs to the Fort Boise military installation on the valley floor at the edge of the foothills in present-day East Boise.

A follow-up survey for cultural resources has been conducted and the Idaho State Historic Preservation Office will be consulted prior to any ground disturbing activity involved in the trail construction to ensure that significant cultural resources would not be adversely impacted by the trail building activities.

3.6.2 Environmental Consequences – Cultural Resources

3.6.2.1 Alternative 1

Under the No Action Alternative, no new trail linking Five Mile Gulch Trail with Curlew Connector Trail would be constructed, and the current emergency closure of Trail 7 (Orchard Gulch Trail), would be lifted, allowing motorized use on the 0.7 mile segment to resume. The BLM is not aware of any adverse impacts that recreation has on the known cultural resources found in this area of the Boise Foothills.

3.6.2.2 Alternative 2

Construction of 2.03 miles of new single track non-motorized trail would not result in disturbance to important cultural resources. Trail construction may impact a short segment of the water pipeline route, but it is anticipated that the cultural resource survey and written site record of the pipeline would be adequate mitigation for all anticipated impacts to that pipeline. The other cultural resources noted above are out of the area of potential effect and so those cultural resources would not be impacted by the proposed trail construction, use, or maintenance.

The existing trail segments would continue to be used, including the road/trail up Five Mile Gulch that dates prior to 1892. The anticipated foot, equestrian and bicycle use is not expected to damage the road/trail itself, in fact the trails continued use would ensure that the trail remains opened, used and appreciated by the public as an old trail with new adventures for the public users.

3.6.2.3 Alternative 3

Impacts of no new trail being constructed would be the same as those described in Alternative 1. Impacts of the permanent closure of Trail 7 to motorized use would be the same as described in Alternative 2.

3.7 Social and Economics

3.7.1 Affected Environment – Social and Economics

This area is within the No Unit Grazing Allotment, which is permitted to Frank Shirts. Frank Shirts is authorized to graze approximately 3,500 sheep on the allotment from April 16 through June 30, and October 25 through December 4. The No Unit Allotment consists of 5,973 acres of public, private, and state land and has a management category of "I" or improve.

3.7.2 Environmental Consequences – Social and Economics

3.7.2.1 Alternative 1

Grazing would continue as it is currently permitted. Lifting the current emergency closure of the Orchard Gulch Trail would increase motorized activity in the area, potentially disturbing the bands of sheep, although most recreation activities cause negligible effects to livestock grazing.

3.7.2.2 Alternative 2

The Proposed Action would allow livestock grazing with less/no disturbance from motorized vehicles, ultimately improving the ability to manage the bands of sheep in authorized areas. Permanent closure to motorized activities on the Orchard Gulch Trail is not expected to affect access for the grazing permittee. Construction of a new non-motorized trail would increase the number of visitors in the area of livestock grazing, but negative effects to grazing management are not expected from non-motorized activities.

3.7.2.3 Alternative 3

Alternative 3 would allow the least amount of disturbance to livestock through closure of the Orchard Gulch Trail to motorized activity and no new construction of trails. Livestock management would continue with current operations. This is not expected to affect access for the grazing permittee, nor cause any new disturbance or issues to livestock grazing.

3.8 Cumulative Impacts

Cumulative impacts are those impacts on the environment that can result from the incremental impacts of the actions adopted in this document, added to other past, present, and reasonably foreseeable, related future actions. The National Environmental Policy Act (NEPA) requires that federal agencies include an analysis of cumulative impacts in their environmental

assessments. These analyses are useful to the land manager because they can help place a project in larger perspective, helping to prevent a succession of small, seemingly unconnected and innocuous projects from resulting in significant, unforeseen consequences, over time.

3.8.1 Scope of Analysis

For purposes of this analysis, the geographic area of consideration for cumulative impacts is the 80,000 acre Boise Front, since its proximity to Idaho's largest urban area and its relatively good road access make it the area where the most intensive front country trail-related recreation is occurring. The period of consideration is ten years, extending from the present (2007) back to 2002, and forward to 2012.

3.8.2 Environmental Consequences – Cumulative Impacts, All Alternatives

Soils/Vegetation:

The 19th century introduction and subsequent proliferation of non-native, highly flammable plants in the Boise Foothills, notably cheatgrass, medusahead wild rye, rush skeleton weed, and others, increased the probabilities of more frequent, and severe wildfires, and in the aftermath of these fires, soil erosion and loss of native vegetation tended to be extensive and enduring. In recent years successful rehabilitation of extensive burned areas from a composition of dominantly annual invasive species to a mix of perennial grasses and shrubs has been fairly successful in some locations on the Boise Front, helping to stabilize erosive slopes and reduce fire danger in those areas. Grazing pressure has declined significantly from earlier decades, and this too has helped native and other desirable perennial species to recover and thrive in some areas of the Boise Front. In recent years, aggressive, coordinated fire protection and suppression efforts by managing agencies have often helped to limit burned acreage on the Boise Front. Recent climatic trends across the West have seen sharp rises in average temperature and declines in annual precipitation, and this suggests that despite gains in rehabilitation and improvements in suppression efforts, large, catastrophic fires may be likely to occur on the Front over the next five years. Should a catastrophic fire on the massive scale of the 1996 Boise Front Fire occur, the small and localized effects of any of the three alternatives on soils and watershed, positive, or negative, would, in the context of the 80,000 acre Boise Front, contribute negligible additional cumulative impacts.

Fish and Wildlife/Special Status Animals/Migratory Birds:

Over the ten year analysis period, ongoing subdivision and development of the private lands in the foothills to the west of the project has, and would continue to displace some terrestrial wildlife and birds into less-developed areas of the foothills, including the Five Mile Gulch area. Impacts to wildlife as a result of the Proposed Action, or any of the other alternatives, considered in isolation, are likely to be slight to moderate. When considered in conjunction with ongoing development of other areas of the foothills, it is likely that wildlife populations would continue to experience more disturbance and interaction with humans, more competition for resources, and rising pressure on the productivity of their habitats.

As the inevitable development of the foothills advances, other planned trail projects are likely to be constructed by the public agencies in the Foothills Coalition, and by private developers or home owners associations. If properly planned and located to minimize disturbance to wildlife populations, such projects can help to reduce the impacts of residential development on wildlife.

One of the goals of the Foothills Open Space Plan (2000) is to zone the foothills in order to accommodate rising public demand for recreation access while providing areas that protect wildlife from disturbance. The nearby Boise River Wildlife Management Area (WMA) is managed to protect wildlife habitat in the foothills and to provide a refuge for wildlife from encroaching development and human disturbance. The segregation of large areas of the foothills like the WMA from recreational or residential development while allowing limited, controlled recreational development in other areas, mitigates, but does not eliminate, the inevitable negative effects of rapid human population growth and development on adjacent wildlife populations.

The small and localized effects of any of the three alternatives on wildlife, positive, or negative, would, in the larger context of the 80,000 acre Boise Front, contribute negligible additional cumulative impacts.

Recreation:

As human population and recreation demand in the region inevitably rise over the next five years, providing trail access would help channel this rising use onto signed and managed corridors that occupy areas best able to sustain such use. The alternative to planned, engineered trail systems is an unplanned, user-built system.

Under Alternatives 1 and 3, no new trail would be built, so a minor proportion of the rising public demand in the region for diverse, non-motorized trail-based recreation would remain unmet. The failure of governing agencies to provide additional managed, maintained trail corridors for the public elsewhere across the Boise Front could lead to a proliferation of user-built trails. Such user-built systems can often have a variety of negative features including steep fall line routes that can result in erosion and high maintenance costs, unintentional disruption or displacement of plant or animal populations, and increased social friction between public land users (e.g. motorized vs. non-motorized users). Under Alternative 2, (Proposed Action), recreational use of the project area would rise with the addition of the new trail and its related connections, but use of the trail is expected to remain moderate compared to the more popular foothills trail complexes closer to Boise and would not contribute appreciable additional positive or negative impacts to recreation in the context of the entire Boise Front. Accessing the Five Mile Gulch Trail or the Three Bears/Curlew Connector Trail that connect with the proposed new trail requires a fairly long drive over gravel roads, or alternately a lengthy hiking or biking approach via a network of trails originating closer to town. In either case, the new trail is likely to appeal to a smaller niche group of more athletic and committed long distance trail users than would be the case at more accessible trailheads in the lower portions of the Boise Front.

4.0 Consultation and Coordination

4.1 List of Preparers

Frank Jenks	Recreation/VRM, Team Lead
Tim Carrigan	Wildlife
Mark Steiger	Botany, Vegetation
Paul Seronko	Soils, Watershed
Chris Robbins	Range
Dean Shaw	Cultural Resources

4.2 List of Agencies, Organizations, and Individuals Consulted

City of Boise/Ridge-to-Rivers
Idaho Department of Fish and Game/Boise River Wildlife Management Area
Boise National Forest, Mountain Home Ranger District
Frank Shirts, Livestock Permittee
Treasure Valley Trail Machine Association

4.3 Public Participation

A public meeting at the Foothills Learning Center in November, 2004 gathered written and verbal comments from the public about a variety of foothills-related issues, including the trail project, during and after the meeting. Discussion with Fish and Game personnel about potential impacts of the project to wildlife, particularly deer during the winter months, helped guide its development and refinement.

BLM's emergency closure of the Orchard Gulch Trail in July, 2006 to motorized use was discussed with a representative of a local motorized recreation group, Treasure Valley Trail Machine Association. At that time, the representative felt that the loss of 0.7 miles of motorized opportunity as a result of the closure would not be significant because the trail did not provide motorized users with loop connections or other kinds of unique or high quality recreation experiences, and because several other more desirable motorized routes were available for recreation use nearby in the Foothills.

5.0 References

Boise City Parks and Recreation Department 2000. *Public Land Open Space Management Plan For the Boise Foothills.* Report on file, Boise, Idaho BLM.

Jalkotsky, M., G.P.I. Ross and M.D. Nasserden. 1997 The effects of linear developments on wildlife: A review of selected scientific literature. Prepared for the Canadian Association of Petroleum Producers. Arc Wildlife Services Ltd., Calgary.

Levinski, Carla L. 1982 Best Management Practices for Road Activities, Vol. 1 Idaho Department of Health and Welfare Division of Environment, Boise Idaho.

USDA, 2003 Boise National Forest Land and Resource Management Plan. Intermountain Region. Ogden, Utah. Revised July, 2003.

USDI, BLM 1988 Cascade Resource Area Resource Management Plan. Boise, Idaho BLM.

USDI BLM 2006 Recreation Management Information System. Report on file, Boise District BLM.

Errata Sheet for EA #ID-110-2007-349

On page 2, first sentence, "…BLM's Cascade Resource Management Plan (USDI, 1989)", is corrected to read. (USDI, 1988)

Page 7., under 3.2.1 Affected Environment-Vegetation/Special Species/Invasive Species, first paragraph, third sentence: "Red three awn, an exotic perennial, is also common", is incorrect. Red three awn is a native perennial. The third sentence is removed from the document.

Page 7, under 3.21 Affected Environment-Vegetation/Special Status Plant/Invasive Species, third paragraph, third and fourth sentences: "An intensive botanical survey of the route of the proposed trail has not been conducted, but would occur before any construction begins. Any potential impacts to special status plants would be avoided or mitigated before project implementation", is changed to read, "A botanical survey of the route of the proposed trail has been conducted. The inventory did not detect the presence of either Aase's onion, or Wilcox' primula."

Page 11, under 3.4.1 Affected Environment- Recreation, first sentence: the word "As" incorrectly appears in bold type. It is corrected to normal type.

Page 14, under 3.6.1 Affected Environment-Cultural Resources, last paragraph: "A follow-up survey for cultural resources would be conducted and the Idaho State Historic Preservation Office would be consulted prior to any ground-disturbing activity involved in the trail construction to ensure that significant cultural resources would not be adversely impacted by the trail building activities.", is changed to **"**A follow-up survey for cultural resources has been conducted…"

Page 19, under References, USDI, BLM 1989 is changed to USDI, BLM 1988**.**